




Environmentally responsible procurement workshop with SCE-SSC

Key Environmental challenges of CERN procurement & Case Studies

Embedding Environmental Responsibility in Procurement Process

❖ **Pre-Procurement phase:**
Need definition, life cycle assessment

❖ **Start-Up Meeting**
Procurement Strategy Development



Identifying environmental criteria

❖ **Simplified Technical Auditing** ❖ **Market Survey** ❖ **Specification Meeting** ❖ **Invitation To Tender** ❖ **Evaluation/Clarification** ❖ **Adjudication (Award)** ❖ **Contract Management**

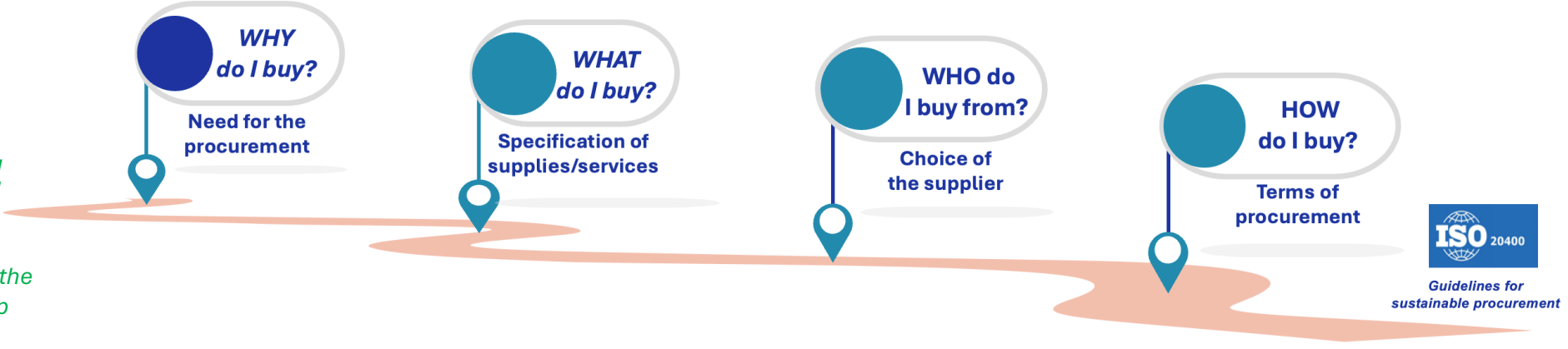


Embedding mandatory/desirable environmental criteria



The most impactful time to embed Environmental Responsibility

(If Procurement Officers are not involved in the pre-procurement phase, then the Start-Up Meeting is the best opportunity.)



CERP team, Procurement and Technical Officers working together through the remaining step of the procurement process!



Case study #1 – Transport of persons

MS4950/SCE

MS-4950/SCE-Transport of Persons – Pre-Procurement phase context

Scope:

- Operate 4 regular lines inside and outside CERN (included Week-End for C3).
- Provide on request the transportation for: Protocol office, CERN visits service, Directors and Department Heads, Legal Service, Host States Relations service and Council Secretariat.
- Service provider is executing transportation tasks as per contract specification
- Transport requests via [ServiceNow](#).
- CERN staff to manage specific tasks as fixed lines inside and outside CERN and monitor tasks execution.



Courtesy slide: SCE-SSC



- Historical transportation contract to be renewed after 7 years (since February 2018).

- Objective to limit the impact on the Environment through integration of eco-friendly vehicles BUT no BVFM envisaged initially, or minimum criteria considered a priori.



MS-4950/SCE - Transport of Persons

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Identifying environmental criteria

❖ **Simplified Technical Auditing**

❖ **Market Survey**

❖ **Specification Meeting**

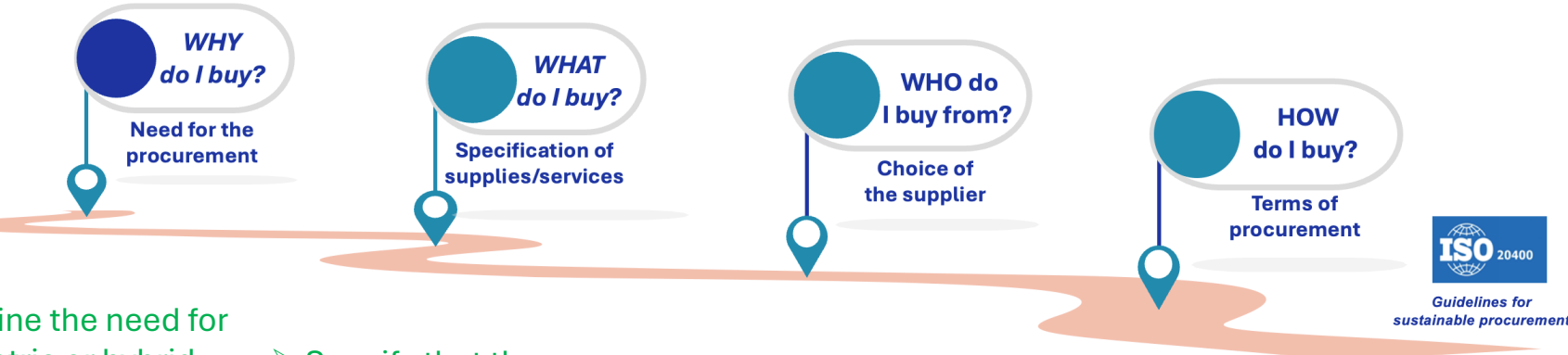
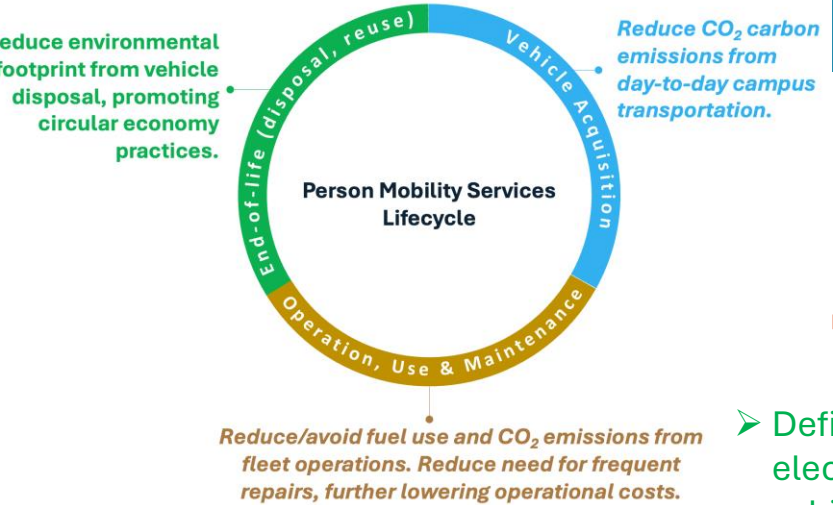
❖ **Invitation To Tender**

❖ **Evaluation/ Clarification**

❖ **Adjudication (Award)**

❖ **Contract Management**

Embedding mandatory/desirable environmental criteria



- Define the need for electric or hybrid vehicles for shuttles.
- Enhance electric vehicles charging infrastructure.
- Expand bike-sharing systems.
- Specify that the supplier must provide electric vehicles and services reducing overall footprint.
- Request maintenance of bicycles, and charging stations for the mobility center.
- Choose suppliers who have green certifications and carbon reduction strategies.
- Provide bike-sharing systems with sustainable maintenance practices.
- The contract should require:
 - Emission tracking.
 - Regular maintenance.
 - A carbon offset plan.
- Include clauses mandating:
 - Emissions reporting.
 - Battery recycling.
 - Periodic performance reviews.

Technical and Procurement Officers work together to ensure that the procurement process aligns with the environmental objectives.

✓ **DONE**

Procurement officers guide the process, evaluate suppliers, and propose the integration of environmentally responsible criteria into purchasing decisions.

✓ **DONE**

Technical officers provide technical expertise and assess the feasibility of environmentally responsible options.

✓ **DONE**

Collaboration and effective communication between these roles are crucial for successfully procuring goods and services in a sustainable way.

✓ **DONE**

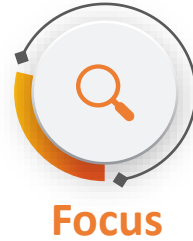


Ask yourself the questions at each step of the procurement process and involve the Procurement team as early as possible.

✓ **DONE**

Results:

- ✓ **From Lowest Compliant bid to BVFM.**
- ✓ **From 30% of electric vehicles for CERN Shuttles to 100%.**
- ✓ ...
- ✓ **Procurement Officer rewarded with a bottle of wine... (1st quick win)**



Case study #2 – MS-5016

Supply of stainless-steel forged blanks

MS-5016/SCE - Supply of 3D forged blanks in stainless-steel 1.4429 AISI 316LN

- Key components in the construction of UHV instruments (necessary strength, precision, and reliability for critical applications).
- Meticulously engineered to meet the demanding specifications of CERN's projects.

Limited Supply

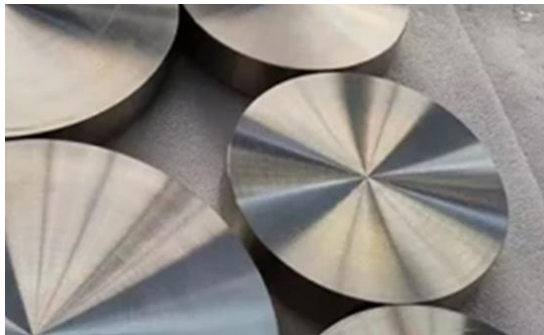
- Since 2019, the supply chain has been severely disrupted, Major suppliers (forges) are regularly out of stock,
- Shortage due to various factors. The demand for high-quality nickel, a key ingredient, has increased, leading to a constrained supply, and pressure on suppliers to meet needs.
- Emerging challenges: geopolitical tensions and global trade disruptions could impact the stability and reliability of supply chains.

Production delays

- The limited availability of premium raw materials → production delays and potential disruptions in the supply chain.
- **Premium raw material 12 - 18 months + 12/16 weeks production**
- **Flanges machining lead time increased (8/10 months) Production overload in subcontracting**

Increased prices

- The shortage has driven up the prices of premium raw materials, → the final price of stainless-steel 3D forged blanks. **(+30% since 2020)**
- This makes it crucial to explore alternative sourcing strategies and manage costs effectively.



Market Survey - GOALS

- ❑ **DR-10293856/SCE - Supply of 3D FORGED BLANKS EN 1.4429**
 - Budget 5 000 000 CHF.
 - About 40t volume necessary to manufacture pieces (dimensions standards CERN Stores) over a period of 5 years.
 - With 40t (MOQ) evaluate necessary to maintain on the contactor's stock park to respond to special requests of CERN Stores for 3D Forging part in different shape: blocks, blanks and rings.
 - Long-term contract.

- ❑ Identify new suppliers technically compliant with the specification, with qualification phase if necessary.

MS-5016/SCE-Supply of stainless-steel forged blanks - MS questions and Results

MS-5016/SCE Supply of stainless-steel forged blanks and rings EN 1.4429 (X2CrNiMoN17-13-3) AISI 316LN for ultra-high vacuum applications

Analysis of the answers to the Market Survey - in case of a combination of firms, please indicate a single conclusion for both replies

CRITERIA	MS QUESTION	VENDOR A	VENDOR B	VENDOR A	VENDOR C	VENDOR D	VENDOR E	VENDOR F	VENDOR G
Conflict mineral sourcing	Does the Firm or any member of the Group of Firms use tin, tantalum, tungsten (including their ores) or gold in its products or services?	Yes	No	No	No	No	No	No	No
	Has the Firm or any member of the Group of Firms developed, or is it in the course of developing, a due diligence process aimed at avoiding the use of conflict minerals?	Yes	No	No	Yes	Yes	No	No	No
Sustainability	Do you engage in Sustainability initiatives?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Do you have initiatives to achieve improved environmental or sustainability outcomes within its operations?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Do you have programs or initiatives across its supply chain that are directed towards becoming aware of and improving the sustainability performance of its products (including from a Life Cycle perspective and ethical sourcing)?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
CO2 Emissions	Are you measuring Greenhouse Gas (GHG) emissions, setting emission reduction targets or reducing emissions?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Do you have experience in completing Lifecycle Carbon Assessments to calculate the embodied carbon emission of products they supply?	Yes	Yes	No	No	Yes	Yes	Yes	No
Systems for Environmental Management	Do you have Operational Environmental Management System (EMS)?	Yes	No	Yes	No	No	Yes	Yes	Yes
	Do you have ISO 14001, EMAS, or similar certifications?	Yes	No	Yes	No	No	Yes	Yes	N/A
	Do you have a policy committing the Firm or any member of the Group of Firms to a programme of environmental improvement?	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
	Do you have Environmental management KPIs?	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Packaging	Do you minimise or reduce the amount of packaging used?	N/A	No	Yes	Yes	Yes	Yes	Yes	Yes
	Do you have reductions in packaging volumes and set targets for further packaging reduction and recycling?	Yes	No	No	Yes	No	Yes	Yes	Yes
	Do you have any 'take-back' of packaging supplied with products and evidence that the collected packaging is recycled and/or reused?	No	No	Yes	Yes	No	No	No	No
Transport and Logistics	Do you have initiatives to improve efficiencies in delivery, such as reduced travel distances and/or frequency of travel associated with distribution of products, or transport logistics software that incorporates sustainability considerations?	Yes	Yes	N/A	Yes	Yes	Yes	Yes	Yes
	Do you have initiatives to reduce the environmental impacts of travel, such as fuel efficiency, reduced air and noise pollution, or reduced carbon emissions?	Yes	Yes	N/A	Yes	Yes	Yes	Yes	Yes
	Are you working in compliance with or working towards an eco-label or other credible sustainability credential relevant to transport and logistics?	Yes	Yes	N/A	Yes	Yes	Yes	Yes	Yes

MS-5016/SCE-Supply of stainless-steel forged blanks - Considerations for IT

Following a review of the MS responses the CERP team have suggested the following IT requirements and spec changes

MS-5016/SCE Supply of stainless-steel forged blanks and rings EN 1.4429 (X2CrNiMoN17-13-3) AISI 316LN for ultra-high vacuum applications									
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	Do you have reductions in packaging volumes and set targets for further packaging reduction and recycling?	Yes	No	No	Yes	No	Yes	Yes	Yes
	Do you have any 'take-back' of packaging supplied with products and evidence that the collected packaging is recycled and/or reused?	No	No	Yes	Yes	No	No	No	No

Suggested changes to the IT specification:

- 1. Minimised Packaging Volume** - Optimise packaging to reduce material use while ensuring product safety.
- 2. Reuse of Transport Packaging** - Design transport packaging (e.g., pallets, crates) for reuse where operationally feasible.
- 3. Circular Economy** - Take-back schemes are optional but encouraged.
- 4. Sustainable Materials** - Use recyclable, biodegradable, or reusable materials where possible and report the percentage.
- 5. Waste Management Support** – Design packaging to facilitate recycling or proper disposal of packaging materials.

MS-5016/SCE-Supply of stainless-steel forged blanks - Considerations for IT

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CO2 Emissions	Are you measuring Greenhouse Gas (GHG) emissions, setting emission reduction targets or reducing emissions?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Do you have experience in completing Lifecycle Carbon Assessments to calculate the embodied carbon emission of products they supply?	Yes	Yes	No	No	Yes	Yes	Yes	No

Suggested changes to the IT requirements:

Requiring suppliers to conduct lifecycle carbon assessments for Stainless-Steel forged blanks to **measure their embodied carbon emissions by the end of the first 1 year of the contract.**

These are just suggestions from the CERP team, Procurement and Technical Officers still have the choice to include these in the IT or not!



Signing Up to **Responsibly**

- Responsibly is the supplier sustainability due diligence tool that has been licenced by CERN.
- It fulfils all CERN Data Protection and Enterprise Cloud Providers Rules and therefore its use has been authorized.

Accessing the Responsibly platform:

1. **Navigate to the sign-up page:**
<https://app.responsibly.tech/sign-up>
2. **Enter your CERN email address (@cern.ch).**
3. **Select a strong password fulfilling the security requirements listed when you click into the password field.**
4. **Confirm the selected password.**
5. **After clicking “Sign up” you will receive an email to verify your new account.**



Sign up to Responsibly

By signing up, you agree to our [terms & conditions](#).

Questions & Answers



EC Enrico Cennini
To Stephanie Marie Blanchard; Sebastien Sonnerat; Gilles Bollinger; Char

4.2.4 Environnement

Le CERN s'est fixé des objectifs environnementaux <https://hse.cern/environment-report-2021-2022> et plus récemment une Politique d'achat environnementalement responsable.

Communiquer les objectifs environnementaux du CERN!

mar. 11.06.2024 15:18

You forwarded this message on 12.06.2024 10:20.

Le CERN s'est fixé des objectifs environnementaux ([Environment Report](#))

Le CERN s'attend à ce que ses contractants contribuent à l'accomplissement des objectifs de l'Organisation au travers des services/biens fournis.

Engager les fournisseurs!

Lorsque cela est possible, en fonction de la maturité en matière de durabilité du Contractant, le CERN souhaite également organiser des échanges au sujet des meilleures pratiques en matière de protection de l'environnement et de durabilité.

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Reply Reply All Forward

mar. 11.06.2024 15:18

Dans le cadre du terme:

Spécifier les critères!

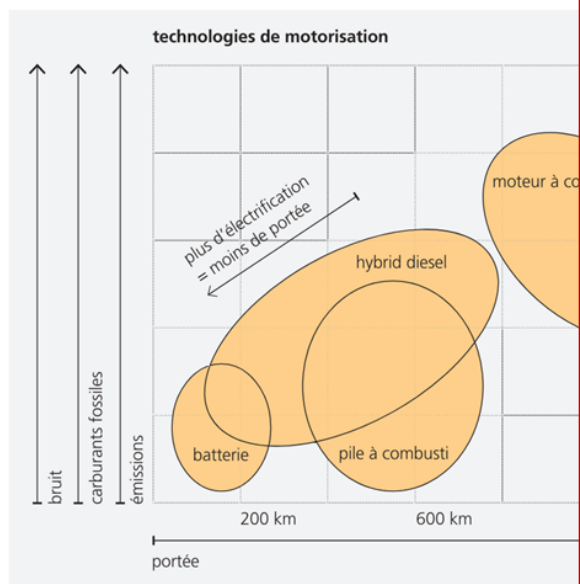
- Émissions et efficacité énergétique (d'émissions Efficacité énergétique (carburant) affi
- Options de carburants alternatifs (par des carburants alternatifs Soutien aux infrastructures hydrogène.
- Pratiques d'entretien
- Formation à l'éco-conduite
- Gestion de la flotte consommation
- Utilisation des carburants alternatifs
- Système de gestion environnementale
- Utilisation des énergies renouvelables (solaire ou éolien)
- Rapports et suivi
- Amélioration continue rendement énergétique
- Analyse du cycle de vie
- Gestion des déchets
- Responsabilité sociale

RE: IT: transport de personnes

EC Enrico Cennini
To Stephanie Marie Blanchard; Sebastien Sonnerat; Gilles

You forwarded this message on 12.06.2024 10:20.

A titre d'information :



Graphique 5: autonomies et impact environnemental des véhicules tels qu'un plein (source: CarPostal).

Innovation: le car postal à pile à combustible répond aux attentes et a progressé. Elle autorise aujourd'hui des autonomies comparables à un plein soutenu par l'UE. Dans le cadre de «Clean Hydrogen in Europe»

Le CERN demande au Contractant de satisfaire aux critères de responsabilité environnementale ci-après ou, à minima, d'indiquer le cas échéant les actions envisagées à court, moyen et long terme :

- Émissions et efficacité des véhicules : le Contractant doit utiliser des véhicules à faibles émissions, tels que les véhicules électriques, hybrides, à pile à combustible ou, à minima, ceux qui répondent aux dernières normes d'émissions Euro.
- Efficacité énergétique : les véhicules conventionnels doivent répondre à une norme minimale d'efficacité énergétique afin de réduire la consommation globale de carburant et les émissions de gaz à effet de serre.
- Options de carburants alternatifs : le Contractant doit utiliser des véhicules alimentés par des carburants alternatifs tels que, à titre d'exemple, l'électricité, l'hydrogène ou le biodiesel. Au moins 30 % de la flotte, attribuée au CERN, doit être alimentée par des carburants alternatifs tels que l'électricité ou le biodiesel.
- Soutien aux infrastructures : inclure des dispositions pour le développement et l'utilisation des infrastructures nécessaires, telles que des stations de recharge pour véhicules électriques ou des stations de ravitaillement en hydrogène.
- Pratiques d'entretien : le Contractant doit régulièrement entretenir ses véhicules pour fonctionner avec une efficacité optimale et réduire les émissions.
- Formation à l'éco-conduite : le Contractant doit former ses conducteurs aux techniques d'éco-conduite afin de minimiser la consommation de carburant et les émissions.
- Gestion de la flotte : le Contractant doit mettre en œuvre des systèmes avancés de planification d'itinéraire et de gestion de flotte pour réduire les distances de déplacement, les temps d'inactivité et la consommation de carburant.
- Utilisation des véhicules : le Contractant doit optimiser l'utilisation des véhicules pour garantir des taux d'occupation élevés et réduire le nombre de déplacements requis.
- Système de gestion environnementale (SME) : le Contractant doit disposer d'un système de gestion environnementale certifié ISO 14001 ou équivalent pour gérer et réduire systématiquement son impact environnemental.

Re: IT-4950/SCE: Transport de personne: Presentation Bid...



Enrico Cennini

To: Stéphanie Marie Blanchard
Cc: Sebastien Sonnerat; Gilles Bollinger;
Stephanie Molinari; Charles Carayon



09.08.2024



Presentation Bidders IT4950_durabilite.pptx
10 MB

Bonjour Stéphanie,

Voici la présentation complétée avec les aspects environnementaux.

Bien à toi

Bonne journée
Enrico

RE: Emissions CO2 - service de transport de personne



Anna Cook

To: Gilles Bollinger
Cc: Enrico Cennini



20.08.2024

Merci Gilles, en effet, un bon élément à discuter à l'avenir 😊

From: Gilles Bollinger <gilles.bollinger@cern.ch>

Sent: Tuesday, August 20, 2024 1:49 PM

To: Anna Cook <Anna.Cook@cern.ch>

Cc: Enrico Cennini <Enrico.Cennini@cern.ch>

Subject: RE: Emissions CO2 - service de transport de personne

Merci Anna et bon courage pour ton retour.

Oui tu me confirmes bien ce que je pensais, la question subsidiaire étant de savoir si nous devrions considérer ce niveau de détails dans les données du scope 3 à l'avenir ?

On aura l'occasion d'en rediscuter je pense

@+

Gilles

Engagement du CERN envers la durabilité

- ❑ Le CERN s'est engagé à réduire son empreinte carbone et promeut la durabilité dans ses opérations.
- ❑ Le CERN s'est doté d'une politique d'achats environnementalement responsables selon ISO 20400.
- ❑ Nous recherchons des partenaires qui partagent nos valeurs environnementales
- ❑ Ce que nous attendons de nos fournisseurs:
 - Des solutions innovantes améliorant l'efficacité énergétique, réduisant les déchets et minimisant les émissions.
 - La priorité donnée aux matériaux/équipements ayant un impact environnemental moindre tout au long de leur cycle de vie.
 - Des données claires et vérifiables sur les pratiques de développement durable, y compris l'empreinte carbone et l'utilisation des ressources.
 - Incluez vos stratégies et initiatives en matière de développement durable dans votre proposition!



Rejoignez l'équipe!



10/24/2024

Document reference

7



15.05.2025

IPT-PI CERP Policy Training Workshop – Key Environmental challenges of CERN procurement & Case Studies

EDMS 3076346

17

- **Need assessment**
Challenge!

Questions to consider before initiating a purchase :

- *Do I buy what I really need?*
- *Can I apply the 5Rs principles (Refuse, Reduce, Reuse, Repurpose, and Recycle)*
- *Does my procurement strategy include circularity?*
- *What is the optimal blend of quality, cost, and sustainability that offers the best value while respecting the environment?*
- *Can I rent (product-as-service) or share assets with others?*
- *What's happening at the end of the life of the product I buy, is the waste unavoidable?*
- *What best practices from peers could be implemented?*

- **Life Cycle Assessment**
Check/request!

Lifecycle assessment tools:

- [OpenLCA](#) – an open source Life Cycle Assessment software.
- [The LCA Calculator](#) – Instant carbon footprint software for a sustainable design solution.
- [SimaPro®](#) is a LCA software used to perform comprehensive life cycle analyzes of products, services and manufacturing processes.

- **Best practices**
Check!



Check decarbonization guidelines

Per Procurement Families

Decarbonization Opportunity – Insulation alternatives
CERN should explore insulation alternatives, focussing on both the embodied carbon impact and the carbon payback time

Decarbonization Opportunity – UPS System Demand Management
CERN should support a study to remove redundant Uninterruptible Power Supply (UPS) systems to reduce both environmental impacts and fire risk

Decarbonization Opportunity – Punchout catalogues
CERN should engage punchout catalogue suppliers to identify products with low environmental impact and highlight these to CERN purchasers

Decarbonization Opportunity – Product Lifecycle Policy
CERN should identify and promote best practises for extending the lifecycle of IT Hardware including recycling at the end of products useable life

Decarbonisation Opportunity – Recycled Materials
The embodied carbon emissions of Vacuum and Low Temperature components can be significantly reduced by using recycled materials

Decarbonisation Opportunity – Monolithic Silicon Sensors
Monolithic Pixel Detectors may offer an opportunity to reduce the amount of silicon in sensors and improve the technical performance

Decarbonization Opportunity – Air Separation Unit
CERN should re-explore the feasibility of implementing a dedicated CERN air separation unit, including Hydrogen generation for internal transport

Opportunity

- Dedicated air separating unit

Spend Area

- Gases

Description


- An air separation unit dedicated to CERN could be a possibility, to make Hydrogen, Nitrogen, Oxygen and Hard Gases.
- This was investigated previously, however consumption was deemed too low.
- This could avoid the need for CERN to outsource production of these gases

Potential

- By making gasses on site CERN would significantly reduce the emissions from transporting gasses from suppliers sites
- If Hydrogen can be produced with the ASU then this may be able to replace some of the fossil fuel powered internal transport vehicles at CERN

Next Steps

- Engage with the internal transport team to understand their requirements for Hydrogen powered vehicles
- Examine the usage at which this would be a viable option and compare against the forecasted usage
- Calculate from both a cost and carbon reduction perspective



General approaches

Decarbonization Opportunity – Lifecycle Carbon Assessment
CERN should include requirements related to LCA for Designers in Market Surveys and then, if it does not limit competition, tenders

Decarbonization Opportunity – Supplier Carbon Reduction Plans
For large contracts CERN could require suppliers to submit carbon reduction plans and evaluate these as part of the bids if using BVFM adjudication

Decarbonization Opportunity – 'Green Concrete'
CERN should explore the market offering for cement alternatives with lower embodied carbon than traditional Portland cement

Opportunity

- 'Green concrete'

Spend Area

- Civil engineering

Description

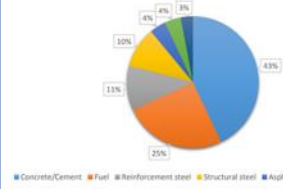
- Cement is the largest component of carbon emissions from infrastructure construction
- Alternatives to traditional Ordinary Portland Cement (OPC) such as Geopolymer Cement (GPC) offer a significantly reduced embodied carbon profile

Potential

- GPC can have ca. 80-90% lower CO2 emissions in comparison to an equivalent amount of OPC.
- Stating a minimum partial replacement is an alternative to a total switch of cement types
- Studies have shown the cost of OPC concrete is higher than the cost of production of GPC for higher grades and marginally lower at lower grades

Next Steps

- Obtain a 'green concrete' specification to use in future procurement exercises
- Understand market offerings for lower-CO2 alternatives
- Consider pricing differences and potential tCO2e reduction through use of alternatives



A link to the full list of Procurement Family Decarbonization Guidelines is here

- **Strategy Formulation**

Raise CERN strategic objectives!

- **Objective setting**

Propose/check!

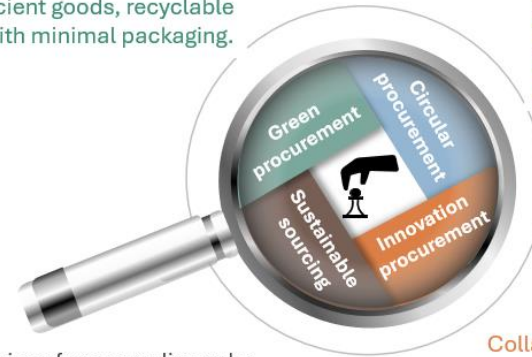
➤ See Case Study #1: MS-4950/Transport of persons-SCE.
Target: 30% of the fleet should be electric.

- **Total Cost of Ownership**

Ask, propose!

➤ Example: At CERN, all costs such as maintenance, repairs, and disposal are taken into consideration in the adjudication price (ISO 50001 certification).

Purchasing products that have a reduced environmental impact throughout their lifecycle such as energy-efficient goods, recyclable materials, or products with minimal packaging.



Selecting suppliers who offer products/services designed for reuse, refurbishment, or recycling thus emphasizing the entire lifecycle of the product and its potential for reuse.

Procuring goods/services from suppliers who demonstrate environmental responsible practices such as reducing carbon emissions, etc.

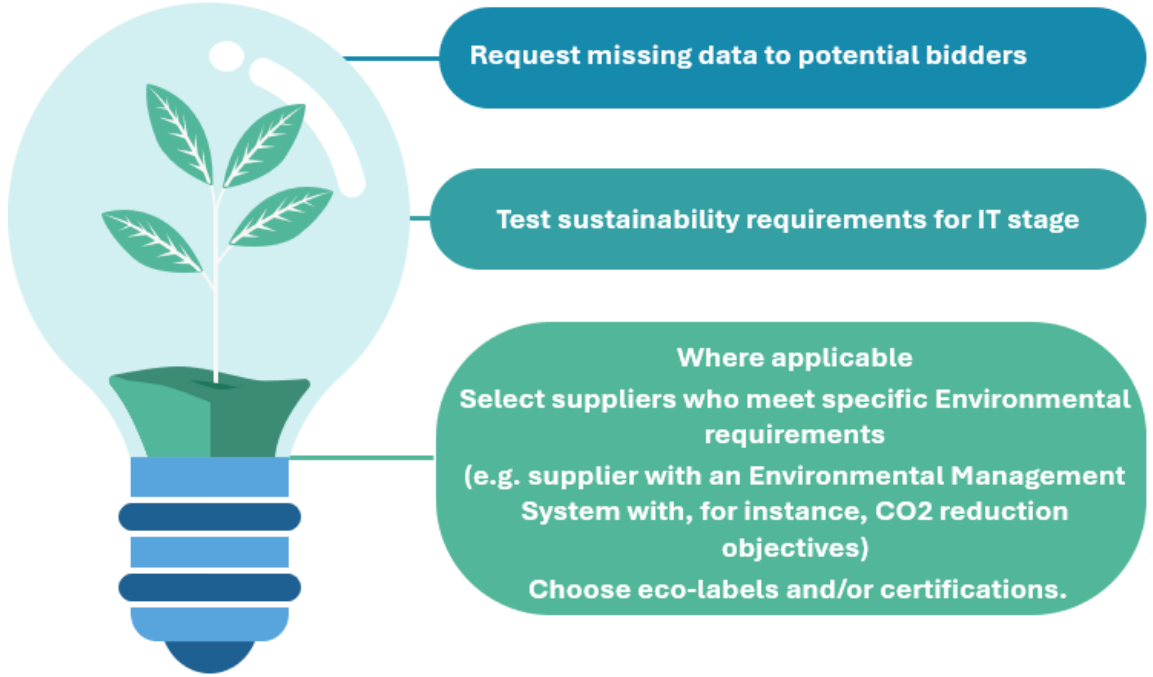
Collaborating with strategic suppliers on innovative solutions such as new technologies, materials, or processes that meet CERN's environmental objectives.



Market Survey phase of Procurement Process

Based on the Procurement Strategy and preliminary assessment of market maturity.

Collect information, Analyse supplier sustainability maturity!



Example: Market Survey analysis provided by the CERP team.

Supplier	Rating	Actions	Remarks	
GAVOT Léman	Good	yes	Certains bus roulent au GTL : un carburant liquide produit à partir de gaz naturel, qui offre une alternative de combustion plus propre que le gazole	Any environment friendly transport foreseen at CERN?
BORINI (meg-bus)	Good	yes	Nous sommes le premier transporteur au monde à avoir équipé une station de sports d'hiver avec des skibus roulant exclusivement au Gaz Naturel Comprimé (GNC). Nous avons construit notre propre station de gaz. Nous assurons également depuis plus d'un an et demi, les services scolaires avec des	Any environment friendly transport foreseen at CERN?
TRANSDEV	Good	yes	Depuis 2023, mise en place de véhicules B100, Gaz et électrique. Charte ADEME CO2 et ISO	Any environment friendly transport foreseen at CERN?
Voyages Gal (SAS)	Good	yes	Partie intégrante du Plan de protection de l'atmosphère de la Vallée de l'Arve depuis le 14 juin 2011, à savoir : réduire les émissions du secteur des transports, réduction de 20 km/h sur les autoroutes et routes secondaires entre le 1er octobre et le 1er avril. Pas de véhicules électrique ou gaz?!	Any environment friendly transport foreseen at CERN?
Autocars Jacquet	Good	yes	implementing measures to significantly reduce our environmental impact : vehicles running on biogas or vegetable oil, electric vehicles, signing up to the EVE programme (voluntary programme to protect the environment) or reducing and recycling waste.	Any environment friendly transport foreseen at CERN?
Autocars Pays de Savoie	Good	yes?	Une flotte autocar récente EURO 5 et EURO 6 à faible émission de CO². Adhésion à la charte OBJECTIF CO². (age du parc, travail sur les consommation, formation des conducteurs, aditif gas-oil.)	Any environment friendly transport foreseen at CERN?
Autocars Saba	Good	yes	Démarche RSE:Le passage de la flotte d'autocars au biocarburant HVO dès 2021 La construction d'un bâtiment neuf abritant une salle et des commodités dédiées à ses équipes de Conducteurs La mise en service de deux véhicules 100% électriques	Any environment friendly transport foreseen at CERN?
Autocars S.A.T	No mention of sustainability	?		Any intention wrt environment protection?
Transports Francony (SAS)	No mention of sustainability	?	2 autocars électrique, pas d'engagement sur le site	Any other intention wrt environment protection?
Ballanfat Autocars	No mention of sustainability	?		Any intention wrt environment protection?

Communicate!

- On CERN environmentally responsible procurement, mission and goals during supplier selection and onboarding.
- Engage supplier early in the process to discuss environmental expectations and capabilities.

Integrating Environmental Responsibility in Technical Specification

• Specification

Assess the opportunity to :

- Ensure that technical specifications include mandatory or, at least, desirable environmental requirements.
- Include measurable environmental requirements on supply chain, packaging, transport, etc.

Example: Supplier shall take back all packaging, delivery outside peak hours, delivery in bulk quantities...

Influence specs!

• Environmental standards

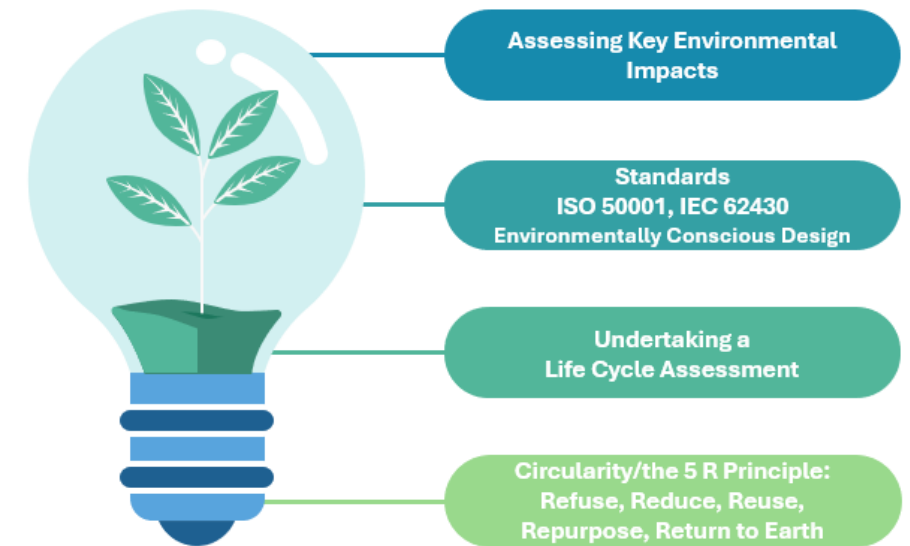
- Add requirements on environmental Laws and Regulations, as well as Environmental Standards.

• Product Lifecycle Consideration

- Incorporate considerations for the entire product lifecycle whenever possible.

Where possible include Environmental requirements in the technical specifications :

- *Decarbonisation strategies - guidelines*
- *Information gathered from MS stage*



- **Supplier assessment**

- **Ask for clarification:**

- Evaluate suppliers based on their environmental performance, including certifications, and capacity to meet CERN environmental objectives.

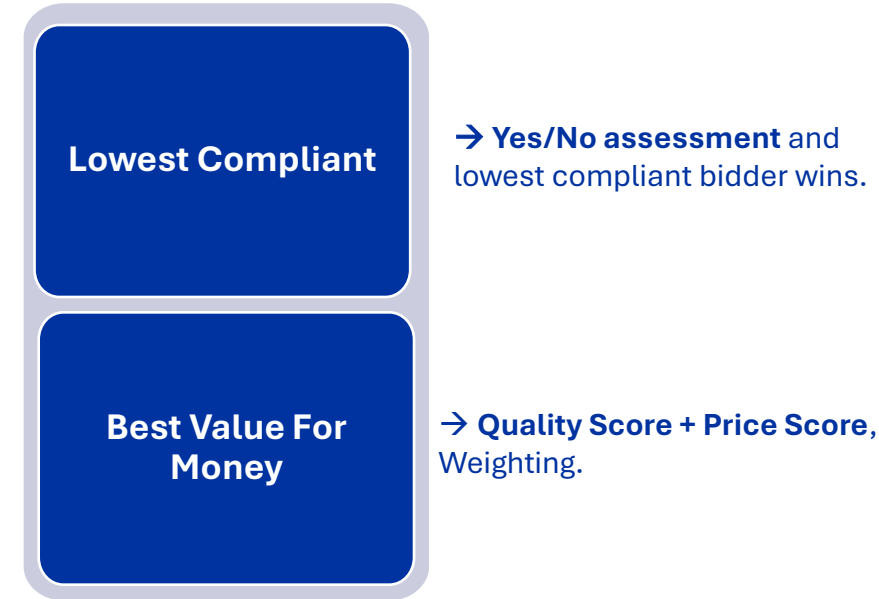
- **Decision making and scoring**

- **Lowest Compliant (LC):** Environmental aspects **are evaluated separately** from technical compliance and **used to inform decision-making** where technically compliant offers are otherwise equal.

- (Note: The environmental performance does not influence the bid score directly but can serve as a tiebreaker or inform post-evaluation discussions!)*

- **Best Value for Money (BVFM):** Environmental aspects proposed by bidders **are explicitly assessed, scored, and weighted as part of the quality criteria**, contributing to the overall bid score

- (Note: environmental performance is a quantified part of the quality assessment, giving it real influence on the award outcome – to prefer as best practice in responsible procurement!)*



Integrating Environmental Responsibility in Contract Management

Monitor!

- **Ongoing monitoring**

- Continuously monitor the supplier's adherence to the environmental clauses of the contract.

- **Performance Reviews**

- Conduct regular reviews of the supplier's environmental performance and collaborate with them to improve their environmental responsible practices.

- **Sustainable Relationship building**

- Foster a collaborative relationship with suppliers, encouraging continuous improvement and new opportunities for environmental responsibility in the supply chain.

Set KPIs and/or SLAs that can be used to measure environmental performance over the contract

New reporting requirements under proposed and current national legislations will require more rigorous reporting and further encourage sustainability clauses to become a standard part of the supplier contracting process.

Key environmental procurement challenges for Cleanliness and Recovery Services

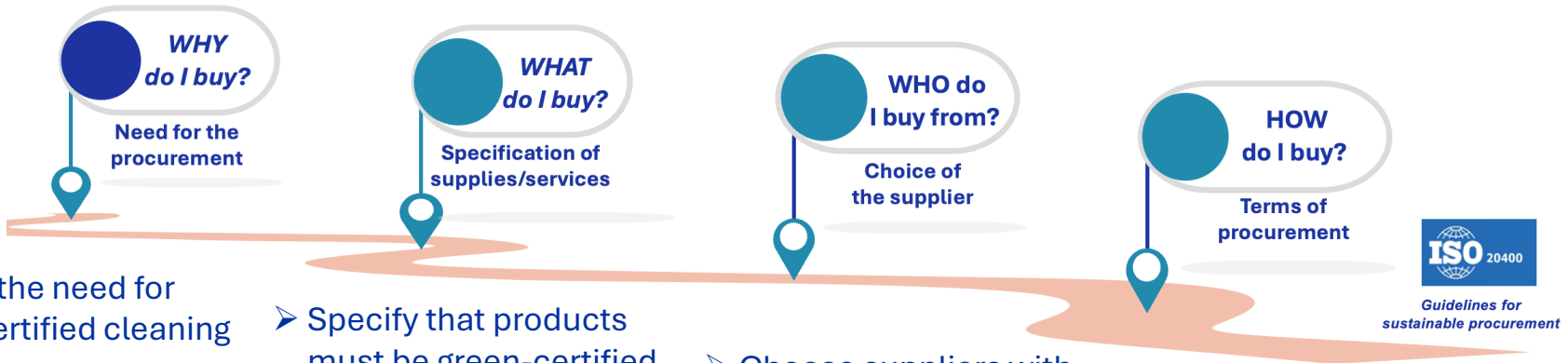
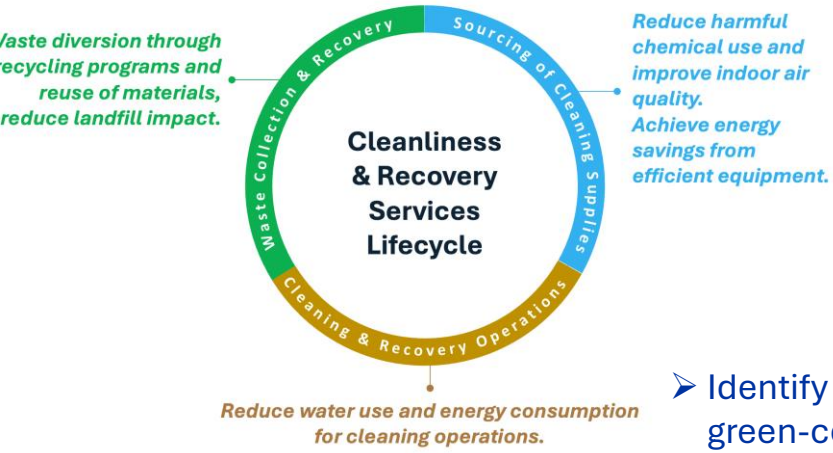
❖ **Pre-Procurement phase:**
Need definition, life cycle assessment

❖ **Start-Up Meeting**
Procurement Strategy Development

Identifying environmental criteria

❖ **Simplified Technical Auditing** ❖ **Market Survey** ❖ **Specification Meeting** ❖ **Invitation To Tender** ❖ **Evaluation and Clarification** ❖ **Adjudication (Award)** ❖ **Contract Management**

Embedding mandatory/desirable environmental criteria



- Identify the need for green-certified cleaning products.
- Identify services that reduce waste through effective recycling and composting programs.
- Specify that products must be green-certified, and equipment must be energy-efficient.
- Request regular waste collection and use of recyclable materials for packaging.
- Choose suppliers with track record of:
 - Using biodegradable cleaning solutions.
 - Managing waste responsibly.
 - Promoting circular economy initiatives.
- Include requirements for regular sustainability reports on cleaning operations, including details on energy use and waste disposal methods.

Key environmental procurement challenges for Installation Services

❖ **Pre-Procurement phase:**
Need definition, life cycle assessment

❖ **Start-Up Meeting**
Procurement Strategy Development

Identifying environmental criteria

❖ **Simplified Technical Auditing**

❖ **Market Survey**

❖ **Specification Meeting**

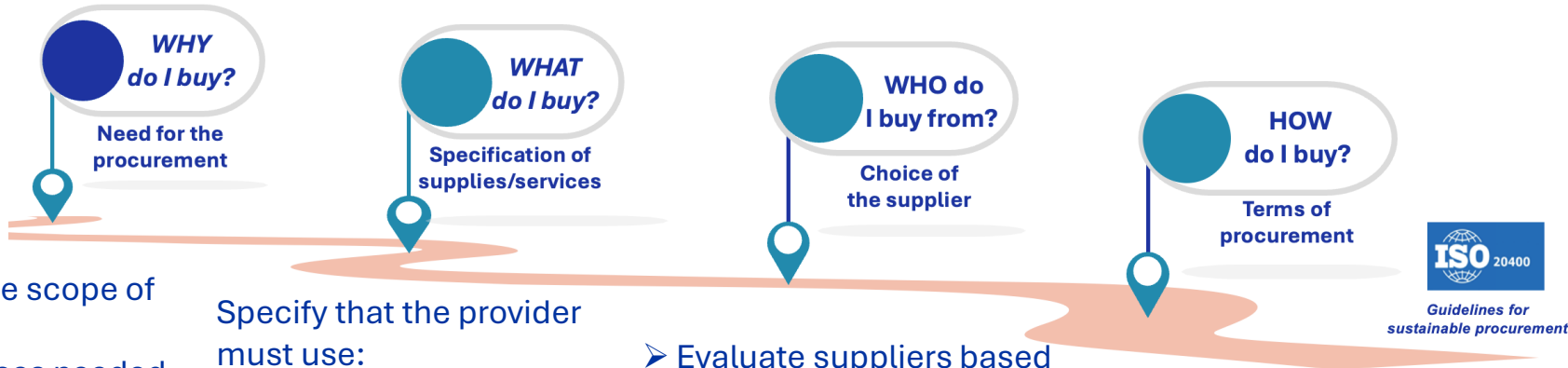
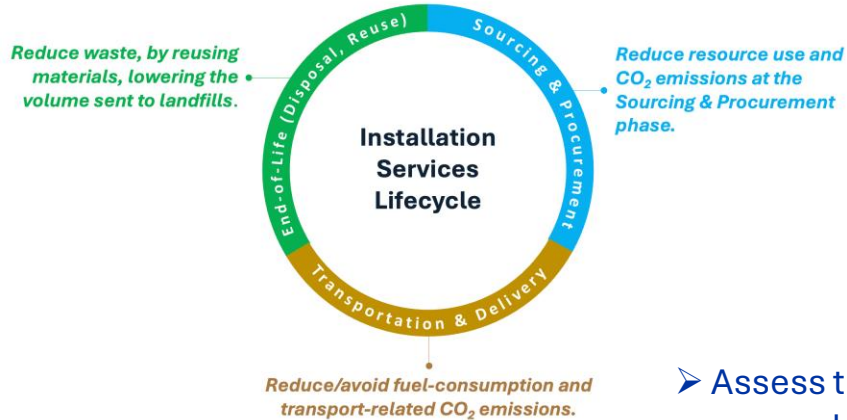
❖ **Invitation To Tender**

❖ **Evaluation and Clarification**

❖ **Adjudication (Award)**

❖ **Contract Management**

Embedding mandatory/desirable environmental criteria



- Assess the scope of removals and services needed.
- Favor sustainable transport solutions.
- Adopt digital administrative processes to minimize paper usage.

Specify that the provider must use:

- Recycled packaging materials.
- Digital tools for vehicle registration and paperwork.
- Electric or hybrid vehicles for transportation.

- Evaluate suppliers based on their environmental performance metrics and certifications (e.g., use of green transportation fleets, ISO 14001).
- Prioritize those who offer digital processes for documentation.

- Include clauses that require the supplier to report on:
- Vehicle emissions.
 - The percentage of recycled materials used in packing.
 - Sustainability certifications.